



Intellectual Property Section Law Department

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DATE;	March 16, 2007	
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	(LOCATION)	(FAX NUMBER)
FROM:	MATTHEW C. LOPPNOW (SENDER'S NAME)	(847) 523-2585 (EXTENSION)
RE:	APPLICATION NO. 09/667,641	_

TOTAL NUMBER OF PAGE(S) 7 (INCLUDING THIS PAGE)

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S)

Zili Li

GROUP ART UNIT:

2871

APPLN. NO.:

09/667,641

EXAMINER: TON, MINH TOAN T

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FILED:

09/23/2000

TITLE:

LIQUID CRYSTAL DEVICE HAVING VARIABLE REFLECTED

WAVELENGTH

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Motorola, Inc.

Intellectual Property Department 600 North U.S. Highway 45 Libertyville, IL 60048

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REPLY BRIEF UNDER 37 C.F.R. § 41.37

15 MS Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

20 Sir:

> In response to the Examiner's Answer dated January 16, 2007, Applicants submit the present Reply Brief.

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I. REAL PARTY IN INTEREST

The Examiner's Answer correctly acknowledges the real party in interest.

II. RELATED APPEALS AND INTERFERENCES

The Examiner's Answer correctly acknowledges the related appeals or interferences.

III. STATUS OF CLAIMS

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The Examiner's Answer correctly acknowledges the status of the claims.

IV. STATUS OF AMENDMENTS

The Examiner's Answer correctly acknowledges the status of amendments.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The Examiner's Answer correctly acknowledges the summary of the claimed subject matter.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The Examiner's Answer correctly acknowledges the grounds of rejection to be reviewed on appeal.

VII. ARGUMENT

Claim Limitations At Issue

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In Claim 1, the limitations at issue are italicized below:

1. A liquid crystal device comprising

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a transparent front plate;

a back plate spaced apart from the transparent front plate;

a cholesteric liquid crystal material between said transparent front plate and said back plate, said cholesteric liquid crystal material having a reflective state wherein said cholesteric liquid crystal material reflects light through said front plate, said light characterized by a first wavelength in the absence of an applied electric field; and

means for applying an electric field, parallel to the back plate, to said cholesteric liquid crystal material in the reflective state to cause said cholesteric liquid crystal material to reflect light characterized by a second wavelength different than said first wavelength.

Applicants' Argument

Applicants maintain the teachings of Kondo cannot be combined with the teachings of Buzak to teach the claimed invention because Kondo deals with a different liquid crystal from the claimed cholesteric liquid crystal, which is only mentioned briefly in Buzak.

As asserted in the original Appeal Brief, Kondo has nothing to do with cholesteric liquid crystal. While the teachings of Kondo do allow for the range of material selection to be increased, the teachings never mention the claimed cholesteric liquid crystal.

The Examiner's Answer alleges the teachings of Kondo provide an advantage such as a wide viewing angle. However, Kondo does not teach the advantage is applicable to the claimed cholesteric liquid crystal. Buzak does teach "Chiral liquid crystal cells are known in the art and function in a manner similar to that described for a cholesteric layer" (col. 3, lines 30-32). However, this only discloses chiral liquid crystal cells function in a manner "similar" to that described for a cholesteric layer. Such does not disclose chiral liquid crystal cells are applicable to all uses of cholesteric liquid crystal. In fact, such does not even disclose that all of the teachings of Buzak are applicable to cholesteric liquid crystal. In particular, the cited section only discloses how chiral liquid crystal is similar to cholesteric liquid crystal. The section does not even teach that all of the teachings of Buzak are applicable to cholesteric liquid crystal.

The teachings of Kondo fail to make up for the deficiencies of Buzak because Kondo has absolutely no disclosure of cholesteric liquid crystal. In fact, the Examiner's Answer does

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not even attempt to address Applicants' arguments with respect to cholesteric liquid crystal. For example, see page 6 of the Examiners Answer, which labels Applicants' assertions with respect to cholesteric liquid crystal with "(e)." However, on page 7, when the Examiner's Answer attempts to respond to Applicant's assertions in corresponding paragraph (e), the Examiner's Answer only discusses twisted nematic type liquid crystal and does not even mention cholesteric liquid crystal.

Furthermore, as asserted in the Appeal Brief, the type of switching used in Kondo cannot provide the claimed feature of causing a cholesteric liquid crystal material to reflect light characterized by a second wavelength different from a first wavelength. In response, on page 7, paragraph (e), the Examiner's Answer again does not even address the claimed feature. The Examiner's Answer only alleges the combination achieves advantages "such as a wide viewing angle" (page 8). However, such is not the claimed causing a cholesteric liquid crystal material to reflect light characterized by a second wavelength different from a first wavelength.

Thus, the Office Action has not provided a prima facie case of obviousness because Kondo does not teach any of its teachings are applicable to the cholesteric liquid crystal.

Therefore, Applicants respectfully submit that independent claim 1 defines patentable subject matter. The remaining claims depend from the independent claims and therefore also define patentable subject matter.

Accordingly, kindly reverse and vacate the rejection of claim 1 under 35 U.S.C. § 103, with instructions for the Examiner to allow claims 1-3.

<u>CONCLUSION</u>

In view of the discussion above, the claims of the present application are in condition for allowance. Kindly withdraw any rejections and objections and allow this application to issue as a United States Patent without further delay.

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The Commissioner is hereby authorized to deduct any fees arising as a result of this Reply Brief or any other communication from or to credit any overpayments to Deposit Account No. 50-2117.

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Respectfully submitted,

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Dated: March 16, 2007

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